



The use of games as a pedagogical intervention with autistic students

Alana de Lourdes Siqueira

ABSTRACT

Autism is a neurodevelopment disorder that embraces spectrums, which results into difficulties of communication, behavior and interaction. On educational field, there are a lot of issues related to learning problems of autistic students and the process of teaching of the teachers. Therefore, this final paper has the objective to emphasize the importance of games as a pedagogical intervention with autistic students and to propose methods that help them develop. To reach the objective of this study, the methodology was a qualitative and bibliographic research through digital and physical books, articles, magazines and dissertations. The discussion pointed to the use of games as a resource responsible for the comprehension of the content teaching in classes to help children on the Autism Spectrum Disorder (ASD). It may be possible to conclude that methodologies such as games as a didactic resource help the students develop their social, cognitive and emotional skills, feeling secure and having a significant learning process.

Keywords: Autism, Games, Pedagogical Intervention.

1 INTRODUCTION

It is known that children and young people are increasingly being diagnosed with autism in the world. Due to the diagnostic deficits of Autism Spectrum Disorder (ASD), students with autism have learning difficulties, causing them, their families and teachers to become frustrated in the face of these obstacles.

Autism is a global developmental disorder that affects the cognitive, communicative, and social areas of individuals who have the diagnosis. Despite countless discussions about disability, its causes are undefined, taking both biological and environmental factors into account. It was after the studies of Leo Kanner and Hans Asperger, in the 1940s, that the understanding of the disorder became more widespread, through clinical observations and theoretical assumptions.

Thus, information was gathered in order to answer the following research problem: is there evidence that games are essential for a better intervention in the teaching-learning process of autistic people?

Initially, the hypothesis is that games are didactic resources and fundamental methodologies in education, especially in the integral development of autistic students, as they provide a more pleasurable and interactive learning.

Thus, the research aims to emphasize the importance of games in the development of students with autism, demonstrating their use in the educational environment. In order to understand the general objective, the following specific objectives were developed: to know the Autism Spectrum Disorder and its characteristics, to demonstrate the educational difficulties existing within the reality of autistic students, to



explain the importance of games in the learning process and to point out the different pedagogical interventions, through games, provided to the student who has the disorder.

The importance of the research is justified by the fact that, with the evolution of medicine and psychology, ASD has become more easily diagnosed. However, with learning difficulties as a consequence of this disorder, the teacher is also responsible for intervening to assist in the development of these students, with the purpose of welcoming and stimulating them according to their singularities.

Thus, the methodology used to carry out the work was a qualitative research of a bibliographic nature, making use of books, articles, dissertations and magazines on the subject and based, mainly, on the studies of Baptista and Bosa (2002), Ortiz (2005), Negrine (1995), Guerreiro and Sousa (2016), Santos, Saraiva and André (2016), among others.

The present work was divided into three chapters. The first chapter, entitled "The Significance of Autism", shows the history of ASD, its characteristics and what are the inferences in the lives of autistic individuals. In the second chapter, called "Games and their contributions", the purpose is to conceptualize games and emphasize their importance in students' learning, following the conceptions of Piaget, Wallon and Vygotsky, considering the game in its social environment and analyzing the educational interest from the point of view of playfulness. The third and last chapter seeks to verify the challenges in the Inclusive Education of autistic people and to point out the relevance of adapting the school curriculum, in order to propose games as pedagogical intervention.

It is understood that the research can contribute to the progress in the Inclusive Education of students with autism, giving support to teachers and families, so that the learning of these individuals is meaningful and pleasurable and with the purpose of developing them integrally.

2 THE SIGNIFICANCE OF AUTISM

The purpose of this chapter is to know the Autism Spectrum Disorder (ASD) and its characteristics and to point out the recurrent difficulties in the social environment of people who have it. To better understand it, the theme was subdivided into three parts, namely: the history of ASD, the definition and characteristics of autism and what are its inferences in society.

2.1 HISTORY OF AUTISM SPECTRUM DISORDER

It is worth noting that Autism Spectrum Disorder (ASD) has been increasingly diagnosed among children and young people around the world. According to the Centers for Disease Control and Prevention (CDC, 2021), in 2021 there was a 22% increase in the prevalence of autism in children aged 8 years (about 1 in 44 children). Thus, with this statistically significant increase, it is necessary to understand the related disorder and its impacts on the lives of individuals (MAENNER *et al* 2018).



The story surrounding the discovery of autism had different interpretations to arrive at more conclusive studies than we have today. Even so, knowledge about this subject is scarce and sometimes ignored by society. However, there are certain explanations for why this deficiency is overlooked and unexplored. To understand these obstacles, the history of autism is fundamental (BAPTISTA; BOSA, 2002).

It is noteworthy that the etiology of autism remains unknown (BOSA, 2002), without a single factor that may be the cause of the disorder, but that genetic and biological factors undergo an interaction for this condition to be observed. The first publications on autism occurred in the 1940s by psychiatrists Leo Kanner and Hans Asperger, making them through observations of their clinical cases and theoretical assumptions. In the studies of Kanner (1943) there was careful attention to the difficulties of social relationships that children had (BOSA, 2002).

According to Bosa (2002), among the characteristics observed, speech delay, motor difficulties and obsession with routines were also strongly questioned and helped in subsequent studies of the future for a more concrete diagnosis and a greater understanding of this syndrome. In the mid-1960s, classic autism, which was defined by Kanner, became better known to other professionals. However, children who fit the fixed characteristics of a classic autism soon appeared, but who had other traits of the disorder.

Thus, groups of parents and guardians were formed to try to understand and seek a better way to intervene in the lives of their family members who had characteristics of this autistic syndrome. Therefore, the definition of autism as a spectrum became even clearer, as there are a variety of conditions that may be associated (BOSA, 2002).

2.2 DEFINITION AND CHARACTERISTICS OF AUTISM

In order for autism to be considered a global developmental disorder, several theories and checks needed to be considered. Its concept has been disseminated in various ways over time, but it was only in 1994 that the DSM-IV was able to evolve and frame autism as a comprehensive pervasive disorder that compromises some main areas: communication; language area; area of sociability.

With the advancement of studies and the observation of autistic individuals, it was possible to diagnose three levels of the disorder, being mild, moderate and severe (levels 1, 2 and 3): at level 1 they need little help; at level 2 they need substantial support, with more therapeutic interventions; At level 3 they need more intense support. The perception of ASD profiles can occur between 12 and 24 months, with the second year of life being the period in which they are most recognized (AMERICAN PSYCHIATRIC ASSOCIATION, 2014).

According to Gillberg's (1990) studies, mental disability is present in 70% of autistic people. The remaining 30% of individuals have verbal difficulties, but some have greater performance in the development of motor and cognitive activities for their age group. Some characteristics present in autistic



people were related to those of their parents and relatives, such as, for example, language delay, which may refer to the biological aspects of the disorder.

Among the traits of this special population, behavior is the one that is most in evidence, being an area of study for possible types of interventions, such as Applied Behavior Analysis (ABA). Of the habits that are part of the autistic spectrum, the non-fixation of the gaze, the lack of interest in physical contact, the impairment of language (verbal and non-verbal), the fulfillment of routines, restricted interests and stereotypies are the ones that draw the most attention when living with autistic people. However, it is essential to note that not all autistic people have these characteristics. Just as neurotypical individuals are different from each other, those with ASD also differ and these distinctions need to be respected, considering their specificities (SILVA, 2022).

2.3 IMPLICATIONS OF AUTISM IN CURRENT SOCIAL LIFE

Due to the evolutions in the scientific field and in the proposition of new studies on Autism Spectrum Disorder, the diagnosis of this syndrome has become increasingly important and with less difficulty, and can contribute to a more efficient help for autistic individuals and, consequently, the improvement of their quality of life. However, there are still several barriers that hinder the well-being of this population.

Even though a child may be diagnosed early with autism, there is often a denial from parents and family members around this issue, generating guilt, frustration and anger. The forms of care related to this child are questions that become reasons for insecurity, excessive worry, sleepless nights, and end up harming the emotional and even physical health of atypical families around the world (SILVA, 2022).

It is worth mentioning that this is due to the fact that, many times, parents and guardians do not know about the subject, as it is not disseminated in the way it should be. Thus, they are afraid and concerned about the child's development in the school environment, for example, when they observe that their children cannot communicate or have difficulties in feeling good when there is a change in the daily life in which they are used to (COSTA, 2012).

These obstacles end up being common even with pedagogy professionals in the classroom due to different factors: difficulty in dealing with behaviors; lack of specialized resources; non-continuity of the actions taken at school by parents and guardians and; insufficient capacity building (BOSA; CAMARGO, 2009).

Thus, the school does not play an inclusive role in the lives of these students with autism, they only integrate them into their physical spaces, using the same methodologies and not taking into account their particularity. Such neglect and lack of knowledge means that these students are unable to have meaningful learning without developing emotionally, socially and cognitively (BOSA; CAMARGO, 2009).



3 THE GAMES AND THEIR CONTRIBUTIONS

The objectives of the chapter are to conceptualize and explain the importance of games in the experience and teaching-learning process of individuals. Initially, the aim is to know the existing concepts of games and what their conceptions are according to Piaget, Wallon and Vygotsky. Then consider gambling in your social milieu. And, finally, to analyze the educational interest from the point of view of playfulness.

3.1 CONCEPT OF GAMES AND THEIR CONCEPTIONS IN THE VIEW OF PIAGET, WALLON AND VYGOTSKY

The game in the daily life of society came from the appropriation of cultures and experiences from generation to generation, as a process of identification of a people and manifestation of their customs and histories (ORTIZ, 2005). In this way, the circulation of knowledge can be considered the result of games and games present in society:

The history of games, as well as history in general, is a human construction that involves socio-economic-cultural factors (ALVES, 2007, p.1).

There are countless definitions and types of games, which can be related to the simple execution of motor activities to the development of psychological factors of the human being. Based on archaeological studies, it was discovered in tomb paintings that board games were already used in Ancient Egypt, such as Senat – Game of Passage. In antiquity, there is also the discovery of toys that were built with pieces of wood and leaves to generate movements and sounds 15,000 years ago. (CREPALDI, 2010).

In order to understand the historicity of games, it is necessary to analyze the different concepts and definitions considered by some of its scholars (ORTIZ, 2005):

- a) The game is an activity with the intention of eliminating excess energy (SPENCER, 1885);
- b) Play is an integral means in the lives of human beings for them to understand it (SCHILLER, 1935);
- c) Play is an activity that generates pleasure in people (RUSSEL, 1980);
- d) Play is a way for children to express themselves, get to know the world and socialize, so that they can develop (ZAPATA, 1988);
- e) The game is an effect of free time, which is important for the development of human beings and their autonomy (LAVEGA, 1997).

It is also observed the importance of games and games in the daily lives of individuals and their various uses according to Piaget, Wallon and Vygotsky, namely, respectively, the action of playing as a cognitive factor, the relationship of the human being with the environment and its socialization and culturalization, for example (ORTIZ, 2005).



3.1.1 Game design for Piaget according to Fuentes

Jean Piaget (1946) lays out his theories to games using a mostly cognitive perspective. The theorist divides human development into stages, in which the individual adapts to the environment and assimilates knowledge through games and games (FUENTES, 2005).

At each stage, there are four types of games that stand out and are fundamental for the child to develop according to his or her age group. In the sensorimotor period (0-2 years), the child acts in the environment through the manipulation of objects, his body and that of people around him, such as running his hand through the mother's hair and skin. This game is called *Exercise Game* and it has activities such as slamming objects on the floor or on each other, throwing them, and fitting them together. During this period, the child is not so interested in interacting with other children, playing individually or with adults (FUENTES, 2005).

Still on the sensory-motor stage, according to Fuentes (2005), the *Building Games*. The child has the desire to create something, using concrete material such as blocks, books, cushions, etc.

In the preoperative stage (2-7 years), the *Symbolic Game* It becomes part of the child's daily life, as the child is able to represent his or her reality individually or socially. A game such as imitating an airplane by using your arms, alluding to its wings, is present in the repertoire of children's games. There is also, within the imaginary aspect, the role game that consists of activities such as "little school" and "daddy and mommy", for example, representing the functions that are part of society (FUENTES, 2005).

The stage of concrete operations (7-11 years) is characterized by the appearance of rules during games and games, such as hide-and-seek and cops and robbers, sharing actions and norms with other people in their social environment. At this stage, the child has to put aside his desires and self-centeredness in order to be able to carry out these activities. From the period of formal operations (12 years onwards), the individual becomes more aware of the rules and respects them in order to achieve a certain common goal (FUENTES, 2005).

3.1.2 Game design for Wallon

Development for Wallon can occur in different types of places, both physical and social, and they are responsible for the formation of personality. The theorist points out that affectivity and intelligence are fundamental for children to be individualized throughout their human growth (OLIVEIRA, 1996).

For the author, emotion is an important factor in establishing affective bonds, in which affectivity is intrinsically linked to motor skills so that the child develops psychologically through his actions. In this way, games contribute to the individual progression of human beings, because when they use their body to perform them, they enter into communication with the environment in which they are inserted (ALMEIDA, 2008).



According to Baranita (2012), the game for Wallon has a voluntary character and can be divided into four types:

- a) *Functional Games* are related to the movements performed by the child, generating pleasure in the new knowledge that is acquired;
- b) *Fiction Games* refer to the individual's imagination, such as "make-believe" games. During this type of game, the child plays roles that are part of their daily lives;
- c) *Acquisition Games*, in turn, arise from the child's desire to understand the world around him, making this apprehension through observation and imitation of gestures, for example;
- d) Finally, *the Manufacturing Games* relate, in a way, to the construction games defended by Piaget, aiming to create and transform a toy or game.

3.1.3 Game design for Vygotsky

Development studies are based, for Vygotsky, on cultural and social aspects. The theorist relates the individual's progression to the learning process, which is an external process (NEGRINE, 1995).

The internalization of symbols with the purpose of representing real or imaginary life is defended by the scholar based on the social interactions that occur through games (BARANITA, 2012).

Thus, according to Baranita (2012), Vygotsky places the game as a social product, as the child develops by relating to other people through it. These games have, then, three characteristics, being imagination, imitation and rules.

Imagination occurs through the performance of motor actions and allows children to symbolize some object or situation, using the body as a tool. These representations can be both material, such as turning a notebook into a computer, and everyday, such as playing dead when playing cop-robber (NEGRINE, 1995).

Through observation, the child imitates the behaviors of people who are part of his social life. From this knowledge of compliance or non-compliance with the rules in society, it constructs new sayings and new actions during the game, reinforcing the notion of the game as a socio-historical perspective according to Vygotsky (BARANITA, 2012).

3.2 GAMBLING IN THE SOCIAL ENVIRONMENT

Socialization in childhood is an essential factor for the child to be able to develop in an integral way in the future. During the industrial society, these small individuals learned social values and customs through contact with adults in general, without being restricted to family and school institutions (MIRANDA, 1984).

According to Miranda (1984), soon after the establishment of the notion of modern family in the bourgeoisie, those responsible for the children began to seek school support to obtain assistance in their development. Thus, the school begins to integrate students into society according to their interests. In



addition, the author points out that the child is already a socialized being from his conception in the world, taking into account his social origin.

Educational institutions are fundamental in the process of identifying human beings and recognizing their potential, because it is in the interaction with the environment and with differences that there is success in socialization, depending on the different ways of acting of people (BORSA, 2007).

To think about the formation of a social being, Fátima (2004) considers the Role Playing Game (RPG) as an instrument for sharing knowledge, in which people discuss in order to solve a given problem, explaining their ideas.

The construction of social learning, therefore, takes place through the realization of games:

Playing promotes the construction of relationships and can only become a game in this way, a postulate that condenses in itself two ideas of special relevance. On the one hand, its role as an instrument of socialization; on the other hand, the need for positive social interaction at the base of play, that is, the social dependence on the game for it to develop (SANMARTÍN, 2005, p. 47).

In this way, communication only occurs through these interactions in games and games, making the child learn through competition, cooperation and participation (SANMARTÍN, 2005).

3.3 EDUCATIONAL INTEREST THROUGH PLAYFULNESS

The meaning of educating in the history of education has gone through several phases of pedagogy. Since the religious educational insertion by the Jesuits in Brazil, for example, education was focused on the transmission of concepts and the faithful reproduction of what was said and done in the classroom. However, at the beginning of the twentieth century, this traditional model lost its strength, giving way to an education centered on the student and their experiences and emotions (SILVA, 2015).

In order to prepare the child for life, the use of playfulness has become essential for a greater understanding of the knowledge acquired by him. In this way, the school began to invest in education through games and games, as students consider the accomplishments of playful activities a satisfactory and pleasurable way of living (MACEDO *et al*, 2021).

For learning to be meaningful, the student needs to be active in this process. However, for this to occur, the teacher has the fundamental role of mediating it through interactive methodologies, motivating and making the child develop integrally (GUERREIRO; SOUSA, 2016).

According to Roloff (2009), classes should be well designed and defined in view of their objectives. In view of this, the teacher has the job of providing "play" in an intentional way, because without intentionalities and expectations in the teacher's view, learning cannot be fertilized.



4 PEDAGOGICAL INTERVENTION WITH AUTISTIC PEOPLE

The purposes of this chapter are to highlight the challenges of inclusive education of autistic students and to demonstrate the relevance of adapting the school curriculum by proposing more interactive pedagogical interventions, based on games, during the teaching-learning process of these students.

4.1 THE CHALLENGES IN INCLUSIVE EDUCATION OF AUTISTIC PEOPLE

The trajectory of the education of students who have some type of disability has not always been on the agenda of political discussions. Although the 1996 Law of Guidelines and Bases of National Education defends the rights of people with disabilities to be included in regular schools, the debate on the universalization and implementation of an Inclusive Education policy in these institutions has occurred with greater intensity since the Federal Constitution of 1988 and the Salamanca Declaration of 1994 (NUNES; AZEVEDO; SCHMIDT, 2013).

According to the 2021 Brazilian school census, 1,194,844 students with disabilities, including autistic students, are enrolled in regular classes, considering the stages of Early Childhood Education, Elementary School, and High School (BRASIL, 2021).

With the increase in this statistical number in relation to 2017 – 896,809 – for example, the government's intention to include the autistic population in regular schools can be observed. However, the practices adopted and those that are not addressed contradict this main objective, further segregating these students (NUNES; AZEVEDO; SCHMIDT, 2013).

Among the difficulties of including autistic students in the educational systems, according to Serra (2004) there is the non-acceptance of the diagnosis by the family, in which the dreams and expectations of having an "ideal child" are shaken, resulting in a readjustment in the family routine:

The family of the individual with autism plays a decisive role in the success of inclusion. We know that these are families that experience psychic pain at different stages of life, from the moment of the news of the disability and during the stages of development, when comparison with other children is frequent (SERRA, 2004, p. 21).

There is also a lack of support for the families and teachers of autistic students, in which their parents feel the need for information about teaching, behavior and what services are available to offer this support (WOLF, 2008 cited by LOPES, 2015, p. 27).

In addition, the scarcity of specific teacher training contributes to the exclusion of autistic students. According to Camargo's studies *et al* (2020), carried out in a regular public school in Rio Grande do Sul, for example, teachers reported difficulties in including these students due to the lack of guidance on teaching strategies to be adapted and the insufficiency of resources that can contribute to the development of these individuals.



4.2 ADAPTATION OF THE SCHOOL CURRICULUM

The need to adapt the school curriculum is a fundamental agenda in the inclusion of students with some type of disability, since the curriculum is broad and has varied conceptions, being an essential tool for the construction of the student's identity (GUEDES; HATTGE; LOPES, 2011 cited by SOUSA; BIRTH; PIRES, 2015, p. 5).

According to the authors Sousa, Nascimento and Pires (2015), it is necessary that the curriculum is used and practiced with coherence in relation to the learner's life and, therefore, must be flexible to develop the learner's potential.

Article 59 of the National Education Guidelines and Bases Law (1996) assures disabled students who attend regular schools modified and specific curricula in order to respect their needs (BRASIL, 1996).

To assist in the development of the autistic student, the curriculum should be adapted to meet and evaluate issues such as cognitive abilities, behavior, family structure, communication, and social interaction, for example (BRENTANI *et al*, 2013 cited by FARIA *et al*, 2018, p. 356).

Therefore, Souza *et al* (2018) Salienta:

The adaptations of access to the curriculum for autistic students correspond to the set of modifications in the physical and material elements of teaching, as well as the teacher's personal resources regarding his preparation to work with these students. They are defined as changes in spatial, material, or communication resources that will facilitate autistic students with special educational needs to develop the school curriculum (SOUZA *et al*, 2018, p. 865).

4.3 PEDAGOGICAL INTERVENTIONS BASED ON GAMES

In order to make progress in the development of learning for autistic students, it is necessary to have a multidisciplinary team supporting the teacher, so that he can plan the best educational strategies, always considering the student's specificities (IRIBARRY, 2002).

Thus, in order to provide meaningful learning to these students, Sanini and Bosa (2015) state that some types of games, such as those of physical-motor interest, language, routines, emotions and behavior, are essential for them to be able to develop skills in Early Childhood Education, guaranteeing their rights to prepare for life.

Performing exercise and construction games for autistic people is important in the first stage of Basic Education, as it promotes the development of broad and fine motor coordination when pushing objects, jumping, fitting materials relating color and shape, also helping in the formation of emotions and the identification of elements (LUNGAREZE, 2019 cited by SANTOS, 2020, p. 15).

Thus, according to Gómez and Terán (2014), games that use the senses of touch and sight, such as puzzles, dance games, memory games, peer identification games, etc., become indispensable for autistic people to remain confident in their learning. In addition, games are very important to work on expressions



and feelings, and can be done through figures and images, such as Volafriends, a digital game that helps in the recognition of facial expressions (SANTOS; HAIL; ANDRÉ, 2016).

Among the educational interventions, digital games also have great relevance in the development of autistic students today, especially in the early years of elementary school. To assist in the routine of these students, some games such as My Special Routine and First Then, collaborate for safety and progress in hygiene care and day-to-day tasks. As a support tool in verbal communication, there is Sono Flex and Livox, with the aim of reporting emotions, quickly interacting with some concepts with "yes" or "no", having as a methodology the presence of texts, videos and pictures (SANTOS; HAIL; ANDRÉ, 2016).

In order for autistic children to overcome the difficulties of understanding symbolic and imaginary factors and situations, it is necessary to provide them with cultural elements, such as toys and objects, in order to handle and play with them in a spontaneous way, giving meaning to the representation of the reality that surrounds them and, mainly, interacting with other children (CHICON *et al*, 2018).

According to Medeiros (2019), the cognitive area can be stimulated through plot and rule games. The teacher must observe the student's interests, in order to have more information and create didactic games. In the process of literacy and literacy, games such as letter bingo, legends, puzzles, memory games, etc. are essential to recognize the alphabet, relate phonemes, develop reasoning, solve problems, in addition to working and welcoming the individual's sensitivity.

Still in the early years of Elementary School, the development of mathematical logical thinking in autistic people should occur through concrete and adapted materials. Games such as addition and subtraction roulette, trails, multiplication bingo and division racing make learning more fun and interesting for students, making it easier for them to understand the proposed content (CHEQUETTO; GONÇALVES, 2019).

5 CONCLUSION

The present work made it possible to highlight the importance of the use of games as a pedagogical intervention with autistic students and how they are benefited during the teaching-learning process. Autism is a global developmental disorder, in which communication, social interaction, behavior and the cognitive area are some of the factors impaired in the daily lives of those who have it.

In order to understand the relevance of the theme, a bibliographic research was carried out to describe Autism Spectrum Disorder, its history, its definitions, characteristics and implications in the experience of the individual with autism. In addition, it enabled the knowledge of pedagogical games that collaborate for the integral development of students with this disability.

The defense of the theme is important, because the deficits presented by the disorder hinder the inclusion and affect the learning of autistic students, in which, if the methodologies and pedagogical



resources are not used seriously by teachers in the development of these individuals, it can lead to demotivation and school failure.

In addition, the research contributed to the understanding of Autism Spectrum Disorder and to the demonstration of games that help in the learning of students with autism.

It was observed, from the studies, that the realization of games as a pedagogical intervention allows the autistic person to progress in relation to the understanding of the contents proposed in the classroom and to have more ease of social interaction, a factor that collaborates in the development of communication and affectivity.

For future research, we suggest more studies on the continuing education of teachers and on the investment of playful resources for the learning of students with some type of disability, since during the performance of the work, the lack of guidance to teachers in relation to teaching strategies and the lack of acquisition of the license of some digital games by the government, were observed as obstacles to the provision of inclusive and quality education.

ACKNOWLEDGMENT

I thank God for giving me strength throughout my career.

I thank my family for their support and motivation, for always being by my side.

I thank my friend Natalia who has been with me throughout these three years of graduation, supporting me and making my days lighter.

I thank Professor Ma. Ana Carolina Carneiro Lopes, my advisor, for making me believe in my potential and for not letting me give up.

I thank the evaluation board for trusting in my studies and helping me in another conclusive stage of my life.

I thank all the autistic students who have passed through my life, for being unique and emphasizing that each human being needs to be respected in the face of their particularities.



REFERENCES

- ALMEIDA, A. R. S. A afetividade no desenvolvimento da criança. Contribuição de Henri Wallon. Goiânia: Revista Inter Ação, v. 33, n. 2, 2008. Disponível em: <<https://revistas.ufg.br/interacao/article/view/5271/4688>>. Acesso em: 29 out. 2022.
- ALVES, A. M. P. A história dos jogos e a constituição da cultura lúdica
The history of games and the constitution of play culture. Revista Linhas, Florianópolis, v. 4, n. 1, 2007. Disponível em: <<https://www.revistas.udesc.br/index.php/linhas/article/view/1203>>. Acesso em: 29 out. 2022.
- American Psychiatric Association. *Manual Diagnóstico e Estatísticos de Transtornos Mentais: DSM - 5*. Porto Alegre: Artmed, 2014. Disponível em: <<https://integrada.minhabiblioteca.com.br/#/books/9788582711835/>>. Acesso em: 19 jun. 2022.
- BAPTISTA, C. R.; BOSA, C., *et al.* Autismo e Educação: Reflexões e propostas de intervenção. Porto Alegre: Artmed, 2002.
- BARANITA, I. M. C. A importância do jogo no desenvolvimento da criança. Lisboa, 2012. Disponível em: <<http://hdl.handle.net/10437/3254>>. Acesso em: 30 out. 2022.
- BOSA, C. A.; CAMARGO, S. P. H. Competência social, inclusão escolar e autismo: revisão crítica da literatura. *Psicologia & Sociedade*. v. 21. 2009. Disponível em: <<https://www.scielo.br/j/psoc/a/KT7rrhL5bNPqXyLsq3KKSgR/?format=pdf&lang=pt>>. Acesso em: 05 out. 2022.
- BORSA, J. C. O papel da escola no processo de socialização infantil. Porto Alegre: O Portal dos Psicólogos, 2007. Disponível em: <<https://www.psicologia.pt/artigos/textos/A0351.pdf>>. Acesso em: 05 nov. 2022.
- BRASIL. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (Inep). *Resumo Técnico: Censo Escolar da Educação Básica 2021*. Brasília, DF: Inep, 2021. Disponível em: <https://download.inep.gov.br/publicacoes/institucionais/estatisticas_e_indicadores/resumo_tecnico_censo_escolar_2021.pdf>. Acesso em: 13 nov. 2022.
- _____. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. *Resumo Técnico: Censo da Educação Básica 2017* [recurso eletrônico]. Brasília: Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, 2019. Disponível em: <https://download.inep.gov.br/publicacoes/institucionais/estatisticas_e_indicadores/resumo_tecnico_censo_da_educacao_basica_2017.pdf>. Acesso em: 13 nov. 2022.
- BRASIL. Lei de Diretrizes e Bases da Educação Nacional, LDB. 9394/1996. BRASIL. Disponível em: <https://www2.senado.leg.br/bdsf/bitstream/handle/id/529732/lei_de_diretrizes_e_bases_1ed.pdf>. Acesso em: 24 nov. 2022.
- CAMARGO, S. P. H. et al. Desafios no processo de escolarização de crianças com autismo no contexto inclusivo: diretrizes para formação continuada na perspectiva dos professores. *Educação em Revista* [online], Belo Horizonte, v. 36, 2020. Disponível em: <<https://doi.org/10.1590/0102-4698214220>>. Acesso em: 15 nov. 2022.



CHEQUETTO, J. J.; GONÇALVES, A. F. S. Possibilidades no ensino de matemática para um aluno com autismo. *Revista Eletrônica Debates em Educação Científica e Tecnológica*, [S. l.], v. 5, n. 02, p. 206-222, 2019. DOI: 10.36524/dect.v5i02.110. Disponível em: <<https://ojs.ifes.edu.br/index.php/dect/article/view/110>>. Acesso em: 24 nov. 2022.

CHICON, J. F. et al. A brincadeira do faz de conta com crianças autistas. *Movimento* [online], Porto Alegre, v. 24, n. 2, 2018. Disponível em: <<https://doi.org/10.22456/1982-8918.76600>>. Acesso em: 24 nov. 2022.
COSTA, S. C. P. O impacto do diagnóstico de autismo nos pais. Universidade Católica Portuguesa. Centro Regional das Beiras. Viseu. 2012. Disponível em: <<https://repositorio.ucp.pt/bitstream/10400.14/11964/1/O%20impacto%20do%20diagn%20e%20autismo%20nos%20pais.pdf>>. Acesso em: 05 out. 2022.

CREPALDI, R. Jogos, brinquedos e brincadeiras. Curitiba: IESDE, Brasil S.A., 2010. Disponível em: <https://d1wqtxts1xzle7.cloudfront.net/56705536/LIVRO_jogos_brinquedos_e_brincadeiras-with-cover-page-v2.pdf?Expires=1667794372&Signature=fi3T~BUNsXEGK5QyNOeisTl3p1p5NKM6kiU7uPs8C8tyK4Sk4E-ig1qqVkaDL9uoHGshEwm021p4-qCNgHw9mjQoKvyLH106dnHua~iXS3wZ5cyy0iEZ3vQSkI71PHfPTEnPuMRTIDIY1Kt~WhyDXsfjKJE7qXanLdBd5H69H47XF9EhH6wJrdxH-643hSR79SFhJh1151bdohsJQ6HZOjV5lqBazZI4UsvZAJESRnAE2e8LRXcRcBI2uvPs-SjcoWJqmu0uGQ2W5hvdHq6V6ETIGIOwSu8R5~E67oDY7dMmtroUvBS0dYMGcxF1H-lg~ZhVAgWJyQqnq5eYfLTNQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA>. Acesso em: 29 out. 2022.

FARIA, K. T. et al. Atitudes e práticas pedagógicas de inclusão para o aluno com autismo. *Revista Educação Especial*, Santa Maria, v. 31, n. 61, p. 353-370, 2018. Disponível em: <<https://doi.org/10.5902/1984686X28701>>. Acesso em: 18 nov. 2022.

FÁTIMA, H. N. O jogo RPG e a socialização do conhecimento. Florianópolis: Encontros Bibli, 2004. Disponível em: <<https://www.redalyc.org/pdf/147/14709907.pdf>>. Acesso em: 04 nov. 2022.

FREIRE, P. Frases sobre educação inclusiva. Disponível em: <<https://poseducacao.unisinos.br/blog/frases-sobre-educacao-inclusiva>>. Acesso em: 27 nov. 2022.

FUENTES, M. T. M. Evolução do jogo ao longo do ciclo vital. In: MURCIA, J. A. M. (Org.) *Aprendizagem através do jogo*. Porto Alegre: Artmed, 2005. Cap. 2, p. 29-44.

GÓMEZ, A. M. S.; TERÁN, N. E. *Transtornos de aprendizagem e autismo: manual de orientação para pais e professores*. São Paulo: Grupo Cultural, 2014.

GUERREIRO, C. A. E. S.; SOUSA, M. J. R. As atividades lúdicas e sua importância no processo de Ensino-aprendizagem. In: MESQUITA, C.; PIRES, M. V.; LOPES, R. P. (Eds.). *I Encontro Internacional de Formação na Docência (INCTE): livro de atas*. Instituto Politécnico de Bragança, 2016. Disponível em: <https://bibliotecadigital.ipb.pt/bitstream/10198/13899/3/incte16_atas-1.pdf>. Acesso em: 06 nov. 2022.

IRIBARRY, I. N. O diagnóstico transdisciplinar como dispositivo para o trabalho de inclusão. In: BAPTISTA, C. R.; BOSA, C. (Cols.). *Autismo e Educação: Reflexões e propostas de intervenção*. Porto Alegre: Artmed, 2002.



KANNER, L. Autistic disturbances of affective contact. *Nervous Child*. V.2. 1943. Disponível em: <<https://pt.scribd.com/document/31771046/Autistic-Disturbances-of-Affective-Contact>>. Acesso em: 19 jun. 2022.

LOPES, A. F. S. P. As necessidades e redes de apoio de famílias de pessoas com perturbação do espectro do autismo. 2015. 127 f. Dissertação (Mestrado Internacional em Políticas e Serviços de Saúde Mental) – Universidade Nova de Lisboa, Lisboa, 2015. Disponível em: <<https://run.unl.pt/bitstream/10362/16776/1/Pimenta%20Filipa%20TM%202015.pdf>>. Acesso em: 15 nov. 2022.

MACEDO et al. A ludicidade na educação infantil. In: BASTOS, A. C. N.; LIMA, E. J. (Orgs.). Apontamentos sobre educação e ludicidade. São Paulo: REASE, 2021. Disponível em: <<https://www.periodicorease.pro.br/rease/article/view/1539/657>>. Acesso em: 06 nov. 2022.

MAENNER, M.J; SHAW, K.A; BAKIAN, A.V, *et al.* Prevalência e características do transtorno do espectro do autismo em crianças de 8 anos – Rede de monitoramento de autismo e deficiências de desenvolvimento, 11 locais, Estados Unidos, 2018. Disponível em: <<https://www.cdc.gov/mmwr/volumes/70/ss/ss7011a1.htm#suggestedcitation>>. Acesso em: 07 out. 2022.

MIRANDA, M. G. O processo de socialização na escola: a evolução da condição social da criança. In: LANE, S. T. M.; CODO, W. (Orgs.). Psicologia social o homem em movimento. São Paulo: editora brasiliense, 1989. v. 8, p. 125-135. Disponível em: <https://d1wqtxts1xzle7.cloudfront.net/56101050/LIVRO_-_Psicologia_social_-_o_homem_em_m-with-cover-page-v2.pdf?Expires=1667783121&Signature=BiC20W~fT-5AII60qgbkvTaVSnv14grx1qZJd~F6UWtA0BQ9HuFX4EicIzr9eB7b0A~nlASnXFJo0fcgh3yqZ5QwVa6UdzQ5NZ3basuqN8Y94dfr5T8gE5VXXW7rTskh~LJRGcnVBqOcZFJXitudnkqk6EmJWUn2SAzp648YmGt01f4Shp7dlunrviGSKTsJ6UoPNoyyIizicPzB6NJRGLHYWiFJlv7KRt4a3sNRICAEEdAHTn5kDav9E VV1qzkwp2YU1SWbhNP11nQZhi-cYTgSUSNp~E~2pnODOV9Zyj0ITFLIY~CBOxTYS0Zcgl22DTGwTNQBkbfvrgLyFFdNU1Zg__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA#page=124>. Acesso em: 05 nov. 2022.

MEDEIROS, K. C. L. Jogos pedagógicos como mediadores no processo de letramento de crianças autistas. 2019. 80 f. Monografia (Especialização em Formação de Educadores para a Educação Básica) – Universidade Federal de Minas Gerais, Belo Horizonte, 2019. Disponível em: <<https://repositorio.ufmg.br/bitstream/1843/34772/1/ACPP%20LASEB%20-%20Kelen%20Medeiros%20%28FINAL%29.pdf>>. Acesso em: 24 nov. 2022.

NEGRINE, A. Concepção do jogo em Vygotsky: uma perspectiva psicopedagógica. *Revista Movimento*, Porto Alegre, v. 2, n. 2, 2007. Disponível em: <<https://www.seer.ufrgs.br/index.php/Movimento/article/view/2183>>. Acesso em: 04 nov. 2022.

NUNES, D. R. P.; AZEVEDO, M. Q. O.; SHMIDT, C. Inclusão educacional de pessoas com Autismo no Brasil: uma revisão da literatura. *Revista Educação Especial*, Santa Maria, v. 26, n. 47, 2013. Disponível em: <<http://www.redalyc.org/articulo.oa?id=313128786005>>. Acesso em: 13 nov. 2022.

OLIVEIRA, I. R. D. O jogo na perspectiva de Wallon: pensamento introdutório. Santa Catarina: Motrivivência, 1996. Disponível em: <<https://periodicos.ufsc.br/index.php/motrivivencia/article/view/5853/20476>>. Acesso em: 30 out. 2022.



ORTIZ, J. P. Aproximação teórica à realidade do jogo. In: MURCIA, J. A. M. (Org.) Aprendizagem através do jogo. Porto Alegre: Artmed, 2005. Cap.1, p. 9-28.

ROLOFF, E. M. A importância do lúdico em sala de aula. Porto Alegre: EDIPUCRS, 2009. Disponível em: <<https://editora.pucrs.br/anais/Xsemanadeletras/comunicacoes/Eleana-Margarete-Roloff.pdf>>. Acesso em: 06 nov. 2022.

SANINI, C.; BOSA, C. A. Autismo e inclusão na educação infantil: Crenças e autoeficácia da educadora. Revista Estudos de Psicologia, Porto Alegre, vol. 20, n. 3, p. 173-183, 2015. Disponível em: <<https://doi.org/10.5935/1678-4669.20150019>>. Acesso em: 21 nov. 2022.

SANMARTÍN, M. G. Aprendizagem de valores sociais através do jogo. In: MURCIA, J. A. M. (Org.). Aprendizagem através do jogo. Porto Alegre: Artmed, 2005. Cap. 3, p. 45-58.

SANTOS, M. Jogos pedagógicos como ferramenta de ensino para alunos com TEA na educação infantil. 2020. 24 f. Monografia (Especialização em Educação e Diversidade) – Instituto Federal de Santa Catarina, Canoinhas, 2020. Disponível em: <https://repositorio.ifsc.edu.br/bitstream/handle/123456789/1834/Mariquiel_dos_Santos_TCCPLS_2020.pdf?sequence=1&isAllowed=y>. Acesso em: 21 nov. 2022.

SANTOS, L.; SARAIVA, M.; ANDRÉ, B. É jogando que se aprende: O uso de jogos educativos digitais e a aprendizagem de crianças autistas. In: *XII Congresso Latinoamericano de Humanidades*, Campos dos Goytacazes, 2016, p. 1-10. Disponível em: <https://www.researchgate.net/profile/Luciana-Santos-13/publication/343141082_E_jogando_que_se_aprende_O_uso_de_jogos_educativos_digitais_e_a_aprendizagem_de_crianças_autistas/links/5f18c1d045851515ef419d28/E-jogando-que-se-aprende-O-uso-de-jogos-educativos-digitais-e-a-aprendizagem-de-crianças-autistas.pdf>. Acesso em: 23 nov. 2022.

SERRA, D. C. G. A inclusão de uma criança com autismo na escola regular: desafios e processos. 2004, 113 f. Dissertação (Mestrado em Educação) – Universidade do Estado do Rio de Janeiro, Rio de Janeiro, 2004. Disponível em: <http://www.proped.pro.br/teses/teses_pdf/Dayse_Carla_Genero_Serra-ME.pdf>. Acesso em 14 nov. 2022.

SILVA, D. A. A. Educação e ludicidade: um diálogo com a Pedagogia Waldorf. Educar em Revista, Curitiba, 2015. Disponível em: <<https://www.scielo.br/j/er/a/9BdKcJfZZFSM9KkkwTFc6yD/?format=pdf&lang=pt>>. Acesso em: 06 nov. 2022.

SILVA, T. I. ABA: autismo, atraso de desenvolvimento e linguagem. 2022. Itajubá, MG. Centro Universitário de Itajubá – FEPI.

SOUSA, M. D. S.; NASCIMENTO, E. P.; PIRES, T. S. J. Adaptação curricular: uma visão psicopedagógica frente às demandas de autismo na escola. Anais II Congresso Nacional de Educação, Campina Grande: Realize Editora, 2015. Disponível em: <<https://www.editorarealize.com.br/index.php/artigo/visualizar/15385>>. Acesso em: 18 nov. 2022.

SOUZA et al. Estratégias de adequação curricular para alunos com autismo. Revista Philologus, Rio de Janeiro, n. 72, 2018. Disponível em: <<http://www.filologia.org.br/rph/ANO24/72supl/70.pdf>>. Acesso em: 18 nov. 2022.